SHAMAYEV, Matvey Fedorovich; KAPLUN, Fayvel' Shmuylovich; TSARENKO,A.P.,
redaktor; KNITNOV,P.A., tekhnicheskiy redaktor

[Handbook for the weigher] Rukovodstvo vesovshchiku. Izd. 2-e.
Moskva, Gos.transp.zhel-dor. izd-vo, 1955. 305 p.   (MIRA 9:3)
(Railroads--Freight)

KAPLIN, F.Sh.; SHAMAYEV, M.F.; GULEV, Ya.F., red.; KHITROV, P.A.,
tekhn. red.

[Manual for the weighmaster] Rukovodstvo vesovshchiku. Mo-
skva, Transzheldorizdat, 1951. 323 p.   (MIRA 16:7)

1. Russia (1923- U.S.S.R.) Ministerstvo putey soobshcheniya.
    (Railroads--Freight) (Weighing machines)

SHAMAYEV, M.I.

Blood supply of the knee joint. Vrach.delo no.12:1303-1305 D '57.
(MIRA 11:2)

1. Kafedra topograficheskoy anatomii i operativnoy khirurgii (zav.
prof. S.T.Novitskiy [deceased]) i kafedra normal'noy anatomii
(zav. - zasluzhennyy deyatel' nauki, prof. M.S.Spirov) Kiyevskogo
meditsinskogo instituta.
        (KNEE JOINT--BLOOD SUPPLY)

SHAMAYEV, M. I., Cand Med Sci -- (diss) "Data on blood circulation of the knee joint ~~~~." Kiev, 1958. 11 pp (Kiev Order of Labor Red Banner Med Inst im Academician A. A. Bogomolets), 200 copies (KL, 15-58, 119)

-22-

SHAMAYEV, M.I. (Kiyev, ul. Geroyev Revolyutsii, d. 4a, kv. 91)

Blood vessels of the synovial membrane of the human knee joint.
Nov.khir.arkh. no.6:73-77 N-D '58.   (MIRA 12:3)

1. Kafedra topograficheskoy anatomii i operativnoy khirurgii (zav. -
prof. S.T. Novitskiy) i kafedra normal'noy anatomii (zav. - zasl.
deyatel' nauki prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.
                    (KNEE--BLOOD SUPPLY)
                    (SYNOVIAL MEMBRANES)

SHAMAYEV, M.I.

Material on the blood supply of the human knee joint. Vrach.delo
no.8:869-870 Ag '58   (MIRA 11:8)

1. Kafedra normal'noy anatomii (zav. - zaslyzhennyy deyatel'nauki,
prof. M.S. Spirov) Kiyevskogo meditsinskogo instituta.
              (KNEE--BLOOD SUPPLY)

SHAMAYEV, M.I. [Shamaiev, M.I.]

New data on the formation time of the Devonian diapir structure
on the Slavyansk dome in the Donets Basin. Dop. AN URSR no. 6:
797-800 '64.
(MIRA 17:9)

1. Donetskiy politekhnicheskiy institut. Predstavleno akademikom
AN UkrSSR V.B.Porfir'yevym [Porfyr'iev, V.B.].

KIREYEVA, G.D.; SHAMAYEV, M.I.

First find of Fusulinidae in the Kartamysh series of the Donets
Basin. Biul. MOIP. Otd. geol. 40 no.4:61-66 Jl-Ag '65.
(MIRA 18:9)

SHAMAYEV, V. I., Cand Chem Sci -- (diss) "A Neutron Activation Analysis of Several
Semiconducting Materials." Moscow, 1960, 11 pp, (Academy of Sciences USSR; Institute
of Geochemistry and Analytical Chem im V. I. Vernadskiy, Academy of Sciences USSR)
200 copies, no price given (KL, 21-60, 119)

20655

S/186/60/002/005/015/017
A051/A130

5.5230

AUTHOR: Shamayev, V. I.

TITLE: An analysis of certain micro-mixtures in selenium and tellur-
              ium by the neutron activation method

PERIODICAL: Radiokhimiya, v. 2, no. 5, 1960, 624 - 629

TEXT: The article describes a method developed for determining the
micro-quantities of tungsten, molybdenum, sulfur, phosphorous and zinc in
selenium and tellurium of high purity, using the neutron activation method.
The method is said to be based on the irradiation of the samples being ana-
lysed in a nuclear reactor, where, as a result of a nuclear reaction of the
$\beta_Z^A(n,)\beta_Z^{A+1}$-type, radioactive isotopes of the irradiated elements are formed
the activity of which serves as the measure of the quantity of the elements
determined. The principle of the described method has been outlined before
by A.A. Smales (Ref. 1: Atomics, 4, 3, 55, 1955), U. Schidewolf (Ref. 2:
Angew. Chem., 70, 7, 181, 1958), W. Meinke (Ref. 3: Science, 121, 177, 1955)

Card 1/7

20655

S/186/60/002/005/015/017
A051/A130

An analysis of certain ....

and I. P. Alimarin, Yu. V. Yakovlev, A. I. Zharin (Ref. 4: V. sb.: Primene-
niye Mechen. atomov v analit. khimii, 58, Izd. AN SSSR, M., 1956). The
author of the present article used the standard method of the activation
analysis based on the simultaneous irradiation of both the analysed sample
and known quantities of salts of the elements under analysis. Table 1 lists
the nuclear constants of the isotopes used and the theoretical sensitivity
of the determination under the following conditions: irradiation time-20
days in a neutron stream of $8.7 \cdot 10^{12}$ $n/cm^2 \cdot sec.$, measured activity -
40 days per sec. The analytical procedure was briefly as follows: the
standard samples were prepared by successive dissolution of the salt solu-
tions of the elements being determined of the grading "kh. ch." to a con-
centration of the order of $10^{-4} - 10^{-5}$ g/ml. 0.1 ml of this solution was
introduced into a quartzite box, evaporated till dry at a temperature less
than 100°C and was irradiated under conditions, identical to that of the
analysed sample. After irradiation the contents of the box were dialkalized
by diluted solutions of acids (For P, Zn and S) or of alkalies (for W and Mo)
by adding the corresponding non-active carriers, the solution was transfer-
red to a measuring flask, from which aliquotte amounts were taken off for
preparing standard samples of the required activity. Salts-carriers of the

Card 2/7

20655

S/186/60/002/005/015/017
A051/A130

An analysis of certain .....

determined elements were added to these, of quantities equal to those of
the substance in the preparations intended for the measurement of the acti-
vity in the analysed sample and in the standards. The standards were sub-
jected to a two- and three-fold radiochemical purification. After irradia-
tion, the weighed portion of the analysed sample (0.5 - 1 gr) was primed at
the surface with diluted hot HCl in order to remove possible impurities on
the surface and was dissolved in heating, in a minimum volume of aqua regia.
Solutions of salt-carriers, in quantities of 10 - 20 mg of each determined
element were added to the obtained solution, and this solution was care-
fully evaporated until dry. The residue was dissolved in a 3 n HCl and
by the action of hydrochloric hydrazine the residue was separated out of
elementary selenium (tellurium), which was filtered off and rejected. By
three-fold precipitation of these elements, by adding fresh portions of se-
lenic or telluric acids the analysed solution was completely purified of ra-
dioactive isotopes of selenium (or tellurium). Then the separation and
radiochemical purification was undertaken of the analysed elements accord-
ding to the scheme presented in Figure 1. Tungsten was separated out in the
form of tungstic acid, purified by coprecipitation of the radioactive ad-
mixtures with a residue of iron hydroxide and reprecipitation of the

Card 3/ 7

20655

S/186/60/002/005/015/017
A051/A130

An analysis of certain ....

tungstic acid. The molybdenum was separated out in the form of lead molyb-
date from an acetic acid solution, purified by extracting with ether from
the hydrochloric solution and precipitation of the -benzoinoxymate of
molybdenum. The phosphorous was separated out in the form of magnesium-
-ammonia, purified by precipitation of ammonium phosphormolybdate, co-pre-
cipitation of the admixtures with a residue of arsenic sulfide and repeated
precipitation of the magnesium-ammonium phosphate. The sulfur was separated
out in the form of barium sulfatè, purified by boiling the residue with
aqua regia and by reprecipitation of the $BaSO_4$ residue. The zinc was sepa-
rated out in the form of a sulfide from the acetic acid medium, purified
by precipitation of the admixtures with the residues of the lead hydroxide
from the ammonium medium, with the residues of the cobalt hydroxide from a
1 n NaOH and by precipitation of the zinc thiocyanate mercurate. The final
preparations intended for the determination of the activity were filtered
on glass assembly filters and their activity was measured on an apparatus
of the B type, with a frontal counter $CH-2B(SI-2B)$. Since during the ana-
lysis the isotope dilution method is used, after the measurement of the ac-
tivity and identification of the extracted radioisotopes, a determination

Card 4/7

An analysis of certain ....

S/186/60/002/005/015/017
A051/A130

was made of chemical yields of the carriers by the gravimetric method,
using the corresponding weight forms of the determined elements. In deter-
mining the % content of phosphorous in the analysed samples, the possibi-
lity of the formation of the radioactive isotope of phosphorous $-P^{32}$, was
considered from the sulfur owing to the side nuclear reaction with fast
neutrons: S^{32} (n, p) P^{32}. A check of the radiochemical purity of the ex-
tracted preparations showed that the latter was satisfactory when follow-
ing the given scheme and yields of 25 - 80 % of the carriers could be ob-
tained. The practical sensitivity of the determination of the different
elements is given as being within the limits of $10^{-6} - 10^{-9}$ g.   The accur-
acy of the determination of the various elements for the concentration of
the order $10^{-3} - 10^{-7}$ % is 10 - 40 %. The time of the analysis (not con-
sidering the time of irradiation) is equal to 15 - 20 manhours. There are
3 tables, 2 figures and 18 references: 2 Soviet-bloc, 16 non-Soviet-bloc.
The four recent English language publications read as follows: J. F. Cos-
grove, G. H. Morrison, Anal. Chem., 29, 7, 1017, 1957; B. Tompson, B.
Strause, M. Leboeuf, Anal. Chem., 30, 6, 1023, 1958; J. Gaittet, Ph. Al-
bert, C. R. Acad. Sci., 247, 21, 1861, 1958; W. A. Brooksbank, G. W. Ledi-
cotte, J. A. Dean, Anal. Chem., 30, 11, 1785, 1958.

Card 5/7

SHAMAYEV, V.I.; SAUNKIN, O.F.

Determination of a microconcentration of gold in high purity
selenium. Izv.vys.ucheb.zav.; khim.i khim tekh. 3 no.1:66-68
'60.   (MIRA 13:6)

1. Kafedra tekhnologii radioaktivnykh, redkikh i rasseyennykh
elementov Moskovskogo khimiko-tekhnologichekogo instituta imeni
D.I. Mendeleyeva.
          (Gold--Analysis)   (Selenium--Analysis)

ZVYAGINTSEV, O.Ye.; SHAMAYEV, V.I.

Determination of certain microimpurities in high-purity
selenium. Report No.3. Zhur.anal.khim. 15 no.3:325-328
My-Je '60. (MIRA 13:7)

1. D.I.Mendeleev Moscow Chemico-Technological Institute.
(Selenium--Analysis)

SHAMAYEV, V.N., fel'dsher (stantsiya Mayna Ul'yanovskoy oblasti).

Health education in rural areas. Fel'd. i akush. 23 no.12:41 D'58
(MIRA 11:12)
(MAYNA (ULYANOVSK PROVINCE)--HEALTH EDUCATION)

8(4)   SOV/112-59-4-7270

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 117 (USSR)

AUTHOR: Chizhov, V. A., and Shamayev, Yu. I.

TITLE: Use of High Frequency Currents in Glass Welding

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga, 1957,
   pp 356-360

ABSTRACT: Investigating the effect of temperature within 20-700°C and of
   frequency on the conductivity of some glasses has led to the practical usage of
   3 types of glass heating: (1) at lower temperatures — a high-frequency
   dielectric-loss heating; (2) from 500°C on — through-conductance heating
   (slightly dependent on frequency); (3) at a temperature over 1,000°C —
   induction heating because the electrical conductivity abruptly rises. Two
   methods of heating a glass edge for welding purposes are presented: (1) a
   conducting-coating method and (2) a combined gas-flame and electric method
   that employs a 0.3-1.5-mc, 20-kw high-frequency oscillator. The gas flame

Card 1/2

SOV/112-59-4-7270

Use of High Frequency Currents in Glass Welding

serves for a preliminary heating. The burners are jointly used as electrodes.
The influence of a number of phenomena upon welding conditions has been
investigated.

L.A.G.

Card 2/2

SHAMAYEV, Yu. M., Engineer

"New Methods of Oscillographic Recording of Superhigh Frequencies." Sub 26 Oct 51,
Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov

Dissertations presented for science and engineering*degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

* Candidate Technical Sciences.

Shamayev, Yu. M.

AID P - 945

Subject   : USSR/Electricity

Card 1/1   Pub. 27 - 14/25

Authors   : Bogolyubov, V. Ye., Kand. of Tech. Sci., and
               Shamayev, Yu. M., Kand. of Tech. Sci., Moscow

Title   : Electrolytic cell with the least distorting wall -
               reflection effect

Periodical : Elektrichestvo, 10, 68-72, O 1954

Abstract   · The use of the electrolytic cell prevails in the study of
               models of various kinds of fields: electrostatic, magnetic,
               electromagnetic, temperature, hydrodynamic and others. Al-
               so, certain problems of the theory of electric circuits can
               be solved with the help of the cell. However, reflections
               of the field from the cell walls have a distorting effect,
               which can be eliminated by screening, or greatly reduced
               by the proper selection of conductivity of the cell walls.
               The method of selection is discussed. Seven diagrams,
               9 references (1922-1952).

Institution : Moscow Power Institute im. Molotov
Submitted   : My 17, 1954

Shamayev, Yu. M.

USSR/Chemistry - Physical chemistry

Card 1/1   Pub. 22 - 26/48

Authors   : Bogolyubov, V. E., and Shamayev, Yu. M.

Title   : Electrolytic bath with semi-conductive baths

Periodical   : Dok. AN SSSR 98/3, 423-426, Sep 21, 1954

Abstract   : A method for the selection of the conductivity ratio of the electrolyte and
               the walls of the bath for the purpose of obtaining a minimum hindrance po-
               tentials is presented. The necessity of considering the reflected images
               from two boundaries (electrolyte - wall of bath and wall of bath - surround-
               ing medium), in the case of a wall with infinite conductivity, is explained.
               A complete solution for such a problem, derived by the method of image re-
               flection with consideration of the boundary conditions, is described. Five
               USSR references (1943-1952). Graph; drawing; diagrams.

Institution : The V. M. Molotov Energetics Institute, Moscow

Presented by: Academician S. A. Lebedev, March 1, 1954

SHAMAYEV, Yu. M.

BOGOLYUBOV, V. Ye.

"The Use of Semiconductor Coverings on the Walls of an Electrolytic Bath for Decreasing Distortion," pp 240-258, ill, 10 ref.

Abst: A method for substantial reduction of noise potential, as compared with the actual potential, consisting of an application of semiconducting coating of the bath walls, is suggested. The advantages of such coatings are pointed out.

SOURCE: Trudy Moskovskogo Energeticheskogo In-ta im. V. M. Molotova MVO SSSR (Works of the Moscow Energetics Institute imeni, V. M. MOLOTOV of the Ministry of Higher Education SSSR), no 18, Electric Vacuum Technology and Instrument Building, Moscow-Leningrad, Gosenergoizdat, 1956

SUM 1854

SHAMAYEV, Yu. M.

3

Decrease of the distortions of the fields which form in an electrolytic bath. Yu. M. Shamaev and N. G. Katkov (V. M. Molotov Inst. Energetics, Moscow). *Pribory i Tekh. Eksperimenta* 1956, No. 2, 94-9.—The available nonconducting walls for electrolytic baths cause a field distortion, such that the model customarily drawn (straight lines of flux from cathode to anode) is actually distorted. A math. calcn. is undertaken and drawings are presented of the shapes of the walls of such baths, so that fields are produced which resemble those in the textbooks.   Werner Jacobson

MT

BOGOLYUBOV, V.Ye., kandidat tekhnicheskikh nauk; SHAMAYEV, Yu.M., kandidat
tekhnicheskikh nauk.

Using semiconducting coatings to reduce distortions due to the
walls of electrolytic tanks. Trudy MEI no.18:240-259 '56.
(MLRA 10:1)

1. Kafedra teoreticheskikh osnov elektrotekhniki.
(Electric fields) (Semiconductors)

SOV/161-58-3-1/27

18(3)
AUTHORS: Shamayev, Yu. M., Candidate of Technical Sciences, Docent
(Moscow), Lisitsyn, G. F., Candidate of Technical Sciences,
Assistant (Moscow), Pirogov, A. I., Jr. Scientific Collabor-
ator (Moscow)

TITLE: Methods and Results of Measurements of the Static and Dynamical
Characteristics of Ferrites With Rectangular Loop of the
Hysteresis (Metodika i rezul'taty izmereniy staticheskikh i
dinamicheskikh kharakteristik ferritov s pryamougol'noy petley
gisterezisa)

ABSTRACT: In the first chapter it is pointed out that the behavior of
ferrite cores is known under static conditions, and deriva-
tion of the differential equation for the general case of
dynamic magnetic induction is outlined. Work was carried out
at the Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo
ordena Lenina energeticheskogo instituta (Chair for the
Theoretical Foundations of Electrical Engineering at the
Institute of Power Engineering, Moscow) which was awarded
the Order of Lenin. An improved type of galvanometer was used

Card 1/4

SOV/161-58-3-1/27

Methods and Results of Measurements of the Static and Dynamical Character-
istics of Ferrites With Rectangular Loop of the Hysteresis

for the investigations. For weak fields up to 5 oe the genera-
tors 26 I and GIS-2 were used as pulse generators, and for
fields above 5 oe a special generator was developed. A basic
scheme for the experimental arrangement is then given (Fig 4)
with photographs of several oscillograms (Figs 3, 6). In con-
nection with the results of statical tests, a diagram (Fig 7)
shows the reciprocal value of the time needed for magnetiza-
tion as a function of the external magnetic field of the
ferrites VT-2. Next, derivation of induction with respect
to time as a function of the external field is given (Fig 8),
and in the third diagram (Fig 9) the variation of induction
with respect to time as a function of the reciprocal pulse
increase is given. The two first diagrams show an initial
linear increase with increasing field strength, and with
higher values of field strength increase becomes less. Next,
the results obtained by investigations of the influence exer-
cised by temperature within the range of from -60^{0}C to just
below Curie point (Figs 10, 11), and the results obtained by
investigating 9 types of ferrites are given by a table. When
dealing with the dynamical tests, the corresponding differen-

Card 2/4

SOV/161-58-3-1/27

Methods and Results of Measurements of the Static and Dynamical Character-
istics of Ferrites With Rectangular Loop of the Hysteresis

tial equation is first written down, in which the terms with
derivatives of a higher degree are neglected. Next, the
variation of induction with time in dependence of the ex-
ternal field strength is investigated and the results ob-
tained are shown in form of a diagram (Fig 12). The magnetic
resistance and the shift coefficient, and, in conclusion,
the time needed for magnetic reversal are investigated. Final-
ly, the similarity to the magnetic reversal in ferrites with
rectangular hysteresis loop of a great variety of types is
dealt with. The other figures show the following: Figure 1:
a representation of the dynamical characteristic in form of
a surface with the coordinates B, H, $\frac{dB}{dt}$; figure 2: a
schematical drawing of the pulse fields generated by the
generators; figure 5: hysteresis loop; figure 13: the de-
pendence of $r_0(B) \left[= \frac{dB/dt}{H - H_s} \right]$ on induction; figure 14: the
surface of the shift coefficient; figure 15: the curve of
magnetic reversal

Card 3/4

SOV/161-58-3-1/27

Methods and Results of Measurements of the Static and Dynamical Character-
istics of Ferrites With Rectangular Loop of the Hysteresis

$\frac{1}{\tau} = f_1(H_m)$; figure 16: $\frac{\tau_{fr}}{\tau} = f(H_m/H_{cr})$. ($\tau_{fr}$ = time for

impulse front; τ = time for magnetic reversal; H_m = amplitude

of the external field; H_{cr} = critical value of the external

amplitude in which τ_{fr} becomes τ). There are 16 figures, 1

table, and 7 references, 5 of which are Soviet.

1 ; This article was recommended for publication by the
Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo
energeticheskogo instituta (Chair for the Theoretical Funda-
mentals of Electrical Engineering at the Moscow Institute of
Power Engineering)

ASSOCIATION: Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo
energeticheskogo instituta (Chair for the Theoretical Funda-
mentals of Electrical Engineering at the Moscow Institute of
Power Engineering)

SUBMITTED: June 3, 1958

Card 4/4

SOV/142-58-6-13/20

9(9)
AUTHORS: Shamayev, Yu.M., and Konstantinov, S.G.

TITLE: Computation of the Relative Sensitivity of a De-
flection System With Travelling Waves (Raschet
otnositel'noy chuvstvitel'nosti otklonyayushchey
sistemy s begushchey volnoy)

ABSTRACT: The article deals with the computation of the dyna-
mic sensitivity of a deflection system with travel-
ling waves (DSTW), in the form of a semi-circular
ribbon system, under synchronous and asynchronous
conditions of beam motion, without accounting for
dispersion and reflection in the system. In oscil-
lographs for use with VHF and short duration video-
impulses, ordinary methods of extending the fre-
quency range of the scope mechanism - e.g. shorten-
ing the deflection system and/or increasing the de-
flection voltage - are not adequate because they
decrease the sensitivity of the deflection system.

Card 1/4

SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System
With Travelling Waves

flected wave, and on the assumption that electro-
magnetic wave dispersion is absent in the band of
frequencies to be registered. A complex plane is
used for visual representation of the process of
interaction between the electron beam and the
travelling wave field (Figure 2). The results of
computations for an experimental tube with stated
parameters are introduced by way of example. Check-
ing of the formulae used was done with an experi-
mental prototype travelling-wave tube produced by
the Moscow Energetics Institute in 1953, using VHF
frequencies. The influence of the accelerating
voltage on the sensitivity of the tube at a fre-
quency of 3128 mc for computed and experimental
conditions are shown in the graph of figure 4.
This article was recommended by the Kafedra teo-
reticheskikh osnov elektrotekhniki Moskovskogo

Card 3/4

SOV/142-58-6-13/20

Computation of the Relative Sensitivity of a Deflection System
With Travelling Waves

ordena Lenina energeticheskogo instituta (Chair
     of the Theoretical Bases of Electrical Engineer-
ing of the Moscow Order of Lenin   Power   In-
stitute). There are 2 diagrams, 2 graphs, and 16
references, 5 of which are Soviet, 8 English, 1
German, and 2 French.

SUBMITTED: June 16, 1958

Card 4/4

SHAMAYEV, Yu.M., dotsent, kand.tekhn.nauk; LISITSYN, G.F., kand.tekhn. nauk; MEL'NIKOV, E.A., inzh.; OVCHINNIKOV, V.M., inzh. SKUCHAREV, V.V., kand.tekhn.nauk; TITOV, D.G., inzh.

Developing and testing the method of automatic object adjustment of the width of t he line on the screen for electron-beam tubes. Trudy MEI   no.27:267-280 '58.   (MIRA 13:4)
(Cathode ray tubes)

В. А. Гребенова,
Е. Н. Ковшова,
В. Я. Лебедев,
А. Г. Филиппов,
Ю. М. Фаст.

Комплекс полупроводниковых элементов и узлов
цифровой вычислительной машины

10 июня
(с 18 до 22 часов)

А. А. Насаров

Методы расчета устройств на ферритовых сердеч-
никах

Ю. М. Шамаев

Вопросы расчета импульсных схем, содержащих
ферромагнитные сердечники с прямоугольной петлёй
гистерезиса

Н. В. Корольков,
В. С. Гаврилов

Быстродействующие магнитные элементы простого
типа

А. А. Генис

О расчете схем на безынерционных тиратронах

64

---

11 июня
(с 10 до 16 часов)

1. Н. Заволокина

Счетчик на ферротранзисторных ячейках

В. А. Ментов

Применение одноактных ферротранзисторных регист-
ров сдвига импульсов с памятью в схемах автоматики
и телемеханики

Н. В. Корольков

Магнитный формирователь импульсов для питания
магнитных элементов

С. М. Зайцев,
В. Д. Байкозтов

Трёхфазный импульсный источник тактовых сигна-
лов для вычислительной машины на ферритах

11 июня
(с 18 до 22 часов)

В. Н. Шамр

Замедляющие трубки для цифровых машин ди-
скретного счета

65

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report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications im. A. S. Popov (VNIIS), Moscow,
5-12 June, 1959

SHAMAYEV, Yu. M.

28(1) 16.6800

SOV/161-59-1-2/25

AUTHORS: Belyavskiy, Valeriy Fedorovich, Aspirant,
Shamayev, Yuriy Matveyevich, Docent, Candidate of Technical
Sciences

TITLE: Using the Equations of Dynamic State of Ferromagnetic Cores
With Rectangular Hysteresis Loop for the Computation of Impulse
Operated Circuits

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika,
1959, Nr 1, pp 6-22 (USSR)

ABSTRACT: A method for the computation of circuits with ferromagnetic
cores with rectangular hysteresis loop is presented here. This
method is based on the use of equations for the dynamic state
(Refs 1-4). The computation of a very simple loop coupler,
which passes on the information from one core to the other,
is carried out at first. The formulas (25) and (26) are derived,
and the special cases for the use of these formulas are shown
by three examples. These formulas are only valid for an entire
and simultaneous magnetic reversal of the cores, and lose their
validity as soon as the cores are magnetically reversed in
part only. The computation of circuits with a number of ferro-
magnetic cores - the circuits being intended for the multi-

Card 1/2

66548

-24(3)- /6.6800   SOV/161-59-1-4/25

AUTHORS: Shamayev, Yuriy Matveyevich, Candidate of Technical Sciences, Docent, Dyatlov, V. L., Pirogov, Arkadiy Ivanovich, Junior Scientific Worker

TITLE: Dynamic Characteristics of Ferrites

ABSTRACT: The properties of ferromagnetic materials during a magnetic reversal by impulses are investigated here. On the basis of the papers (Refs 3, 2, 5, 6, 7, 8, 1), formula (7) is derived for these properties. The correctness of formula (7) for quite different methods of magnetic reversal in ferrite was investigated experimentally. The experimental results for 3 ferrites of the brands BT-2, K-28 and K-132 are shown. The experimental data correspond to those computed for $r(B)$. The function $H_o(B)$ does not quite correspond with the static boundary-hysteresis loop $H_{cm}(B)$. Formula (12) for the process of magnetic reversal is written down, this formula expressing the process better than (7). B - induction, H - field, r - a certain coefficient. The reversal coefficient and the

Card 1/2

24(3)

AUTHOR: Shamayev, Yu. M.   SOV/48-23-3-31/34

TITLE: Equivalent Circuits and the   Dynamic Characteristics of
              Ferrites (Skhemy zameshcheniya i dinamicheskiye kharakteristi-
              ki ferritov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
              Vol 23, Nr 3, p 420 (USSR)

ABSTRACT: As various investigations showed (Ref 1), it is possible to
              describe dynamic ferrite characteristics by the equation
              $f(B,H, dB/dt...) = 0$ which connects B and H with its deriva-
              tions. The hypersurfaces in the phase space (Ref 1) are the
              geometrical representation of this connection. At the same
              time it is possible to compare this equation with one or more
              electric circuits which represent the equivalent circuit   of
              the ferrite. Thus, the dynamic characteristics may be represen-
              ted by the surface, equation and equivalent circuit. The
              representation of the characteristics in form of a surface
              is very demonstrative and permits graphoanalytical calculations.
              In connection with the consideration of electric circuits the
              application of the equivalent circuit is the most convenient.
Card 1/2   In the case of a pulse-like magnetic reversal the coupling

24(3)
AUTHORS: Shamayev, Yu. M., Lisitsyn, G. F.,   SOV/48-23-3-32/34
Pirogov, A. I.

TITLE: On the Problem of Dynamic Characteristics of Ferrites (K voprosu o dinamicheskikh kharakteristikakh ferritov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 3, pp 420-423 (USSR)

ABSTRACT: The analysis of various experimental data shows that the dynamics of the magnetic reversal of ferromagnetics is in each case characterized by a loop $B(H)$. The loop $B(H_{st})$ does not exert any direct determining effect upon dynamics. The experimental results show that the characteristics $B(H)$ vary greatly under different conditions of magnetic reversal. Similar results are obtained also in the investigation of the sinusoidal field: The characteristics differ in the case of the same amplitude and different frequency and in the case of the same frequency and different amplitude. Dynamic characteristics of ferrites were investigated by means of a device with a generator for current pulses and with two indicators. A large number of different ferrites was investigated by means

Card 1/3

On the Problem of Dynamic Characteristics of Ferrites   SOV/48-23-3-32/34

of this device (VT-1, VT-2, VT-4, K-series, etc). It was found
that the most essential dependences of different ferrites have
a similar form. Figures 1a and 1b show the oscillograms of
current pulses taken on the controlling resistor, and the
voltages on the measuring coiling. As may be seen, the magnetic
reversal can take place in a longer (Fig 1a) or shorter (Fig 1b)
period of time than the time of ascent of the current pulses
(τ_{fr}). Pulse characteristics $1/\tau = f(H)$ were taken for
various ferrites at different constant values of the duration
of ascent of the pulse of the field reversing the magnetism.
The duration of magnetic reversal τ was determined according
to the voltage in the ferrite coiling in a height of 0.1 U_m
with respect to the voltage   pulse. The characteristics
found are well approximated in a wide range of field variations
by the formula $(H - H_0)\tau = S_w$. Figure 2 shows the dependence
$\tau_{fr}/\tau = f(H_m/H_{kr})$ which was taken at different amplitudes
and the duration of magnification in diameter of the external
field (τ_{fr} - duration of the pulse front, τ - duration of

Card 2/3

On the Problem of Dynamic Characteristics of Ferrites   SOV/48-23-3-32/34

magnetic reversal, H_m - amplitude of the external field, H_{kr} - the critical value of the amplitude of the external field if $\tau_{fr} = \tau$). It is possible to draw three different conclusions from figure 2: 1) There is a similarity between the processes of magnetic reversal of pulses. 2) The slowing down of the magnetic reversal is connected with the possibilities of the experimental device. 3) It is convenient to determine S_w and H_o from the formula $(H_m - H_o)\tau = S_w$ at $\tau > \tau_{fr}$, i.e. on the linear part of the curve $1/\tau = f(H_m)$. It is also

possible to obtain this curve analytically from the dynamic characteristic of the ferrite which takes into account the binding B and H with at least one derivation dB/dt. There are 2 figures and 2 Soviet references.

Card 3/3

LOMONOSOV, Vsevolod Yur'yevich; POLIVANOV, Konstantin Mikhaylovich;
    Prinimali uchastiye: SHAMAYEV, Yu.M.; VITKOV, M.G.; POLIVANOV,
    Konstantin Mikhaylovich. ANTIK, I.V., red.; BORUNOV, N.I.,
    tekhn.red.

[Electrical engineering; basic concepts] Elektrotekhnika;
osnovnye poniatiia. Izd.9., perer. Moskva, Gos.energ.izd-vo,
1960. 391 p.   (MIRA 13:9)
            (Electric engineering)

82770
S/103/60/021/008/010/014
B012/B063

AUTHORS: Belyavskiy, V. F.,   Shamayev, Yu. M. (Moscow)

TITLE: Calculation of Electric Circuits With Cores of Rectangular
              Hysteresis Loops

PERIODICAL: Avtomatika i telemekhanika, 1960, Vol. 21, No. 8,
              pp. 1188-1197

TEXT: On the basis of experimental and theoretical investigations of the
dynamic magnetic reversal of ferritic cores with right-angled hysteresis
loops, the laboratory of the kafedra teoreticheskikh osnov elektrotekhniki
MEI (Chair of Theoretical Fundamentals of Electrical Engineering of MEI)
obtained formula (1) (Refs. 1-3) which determines the behavior of the
ferrite in any magnetic reversal. Here, this formula is given as a dif-
ferential equation (3) and integral equation (4), respectively. Two
problems are studied: 1) Calculation of the transient in a circuit with
a toroidal ferritic core and known parameters. 2) Determination of the
parameters of a circuit with several ferritic cores. The two problems are

Card 1/2

24.2200 (1147, 1144, 1164)

AUTHORS: Brin, I.A., Lisitsyn, G.F. and Shamayev, Yu.M.

TITLE: Surface effect in a rectangular hysteresis loop
                ferrite membrane

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
                no. 8, 1961, 53, abstract 8 I342 (V sb. Ferrity.
                Fiz. i fiz.-khim. svoystva, Minsk, AN BSSR, 1960,
                377-385)

TEXT: The surface effect has been evaluated in a thin
ferrite membrane with and without the effect of magnetic viscosity.
If the viscosity is absent it is assumed that the process of mag-
netic polarity reversal of material layers occurs instantaneously
as soon as the intensity of the reversed magnetic field reaches the
value H_c inside the layer. The equation has been derived for this
case of the inter-domain boundary displacement. For actual ferrites,
the time τ of the magnetic polarity reversal is of the order of

Card 1/2

ЗИНИНА Ч, Ю. М. (handwritten)

PHASE I BOOK EXPLOITATION   SOV/4893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fiziko-khimicheskiye svoystva. Doklady (Ferrites; Physical and Physicochemical Properties. Reports) Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the Academy of Sciences BSSR; K. P. Belov, Professor; Ye. L. Kondorskiy, Professor; K. M. Polivanov, Professor; R. V. Telesnin, Professor; G. A. Smolenskiy, Professor; N. N. Sholtes, Candidate of Physical and Mathematical Sciences; E. M. Smolyarenko; Tech. Ed.: L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech. Ed.: I. Volokhanovich.

PURPOSE: This book is intended for physicists, physical chemists, radio electronics engineers, and technical personnel engaged in the production and use of ferromagnetic materials. It may also be used by students in advanced courses in radio electronics, physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-Union Conference on Ferrites held in Minsk, Belorussian SSR. The reports deal with magnetic transformations, electrical and galvanomagnetic properties of ferrites, studies of the growth of ferrite single crystals, problems in the chemical and physicochemical analysis of ferrites, studies of ferrites having rectangular hysteresis loops and multicomponent ferrite systems exhibiting spontaneous rectangularity, problems in magnetic attraction, highly coercive ferrites, magnetic spectroscopy, ferromagnetic resonance, magneto-optics, physical principles of using ferrite components in electrical circuits, anisotropy of electrical and magnetic properties, etc. The Committee on Magnetism, AS USSR (S. V. Vonsovskiy, Chairman) organized the conference. References accompany individual articles.

                                        SOV/4893

Ferrites (Cont.)

Soboleva, L. P., and Ya. M. Kolll. Dynamics of the Reversal of Magnetization of a Ferrite Bar with a Rectangular Cross Section   364

Brin, I. A., G. P. Lisitsyn, and Yu. M. Sharavey. The Surface Effect in a Ferrite Plate With Rectangular Hysteresis Loop   377

Sharavey, Yu. M. Stability of Particular Cycles and Incomodation During Pulsed Reversal of Magnetization of Ferrites With Rectangular Hysteresis Loop   386

Sharavey, Yu. M., A. I. Pirogov, and V. P. Belyavskiy. Pulsed Reversal of Magnetization of Ferrites With Rectangular Hysteresis Loop   391

Rabkin, L. I., and B. Sh. Epshteyn. Ferrites With Rectangular Hysteresis Loop in Weak Fields   401

Card 12/18

Card 4/18

SHAMRAYEV, Yu. M.

PHASE I BOOK EXPLOITATION   SOV/4893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity; fizicheskiye i fiziko-khimicheskiye svoystva. (Ferrites: Physical and Physicochemical Properties. Reports) Minsk, Izd-vo AN BSSR, 1960. 655 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: N. N. Sirota, Academician of the Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Kondorskiy, Professor; K. M. Polivanov, Professor; R. V. Telesnin, Professor; G. A. Smolenskiy, Professor; N. N. Sholts, Candidate of Physical and Mathematical Sciences; E. M. Smolyarenko; and L. A. Bashkirov; Ed. of Publishing House: S. Kholyavskiy; Tech. Ed.: I. Volokhanovich.

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COVERAGE: The book contains reports presented at the Third All-Union Conference on Ferrites held in Minsk, Belorussian SSR. The reports deal with magnetic transformations, electrical and galvanomagnetic properties of ferrites, studies of the growth of ferrite single crystals, problems in the chemical and physicochemical analysis of ferrites, studies of ferrites having rectangular hysteresis loops and multicomponent ferrite systems exhibiting spontaneous rectangularity, problems in magnetic attraction, highly coercive ferrites, magneto-optics, magnetic spectroscopy, ferromagnetic resonance, magneto-optics, physical principles of using ferrite components in electrical circuits, anisotropy of electrical and magnetic properties, etc. The Committee on Magnetism, AS USSR (S. V. Vonsovskiy, Chairman) organized the conference. References accompany the individual ...

PHASE I BOOK EXPLOITATION   SOV/4893

Vsesoyuznoye soveshchaniye po fizike, fiziko-khimicheskim svoystvam
ferritov i fizicheskim osnovam ikh primeneniya. 3d, Minsk, 1959

Ferrity: fiziko-khimicheskiye svoystva. Doklady
(Ferrites: Physical and Physicochemical Properties. Reports)
Minsk, Izd-vo AN BSSR, 1960. 654 p. Errata slip inserted.
4,000 copies printed.

Sponsoring Agencies: Nauchnyy sovet po magnetizmu AN SSSR. Otdel
fiziki tverdogo tela i poluprovodnikov AN BSSR.

Editorial Board: Resp. Ed.: M. M. Sirota, Academician of the
Academy of Sciences BSSR; K. P. Belov, Professor; Ye. I. Kondor-
skiy, Professor; K. M. Polivanov, Professor; B. V. Telesnin, Pro-
fessor; G. A. Smolenskiy, Professor; M. N. Smolin, Candidate of
Physical and Mathematical Sciences; N. N. Sheftel; and
L. A. Bashkirov. Ed. of Publishing House: S. Khelyavskiy; Tech.
Ed.: I. Voloshenovich.

PURPOSE: This book is intended for physicists, physical chemists,
radio electronics engineers, and technical personnel engaged in
the production and use of ferromagnetic materials. It may also
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physics, and physical chemistry.

COVERAGE: The book contains reports presented at the Third All-
Union Conference on Ferrites held in Minsk, Belorussian SSR.
The reports deal with magnetic transformations, electrical and
galvanomagnetic properties of ferrites, studies of the growth
of ferrite single crystals, problems in the chemical and physi-
cochemical analysis of ferrites, studies of ferrites having
rectangular hysteresis loops and multicomponent ferrite systems
exhibiting spontaneous rectangularity, problems in magnetic
attraction, highly coercive ferrites, magnetic spectroscopy,
ferromagnetic resonance, magneto-optics, physical principles of
using ferrite components in electrical circuits, anisotropy of
electrical and magnetic properties, etc. The Committee on Mag-
netism, AS USSR (B. V. Vonsovskiy, Chairman) organized the con-
ference. References accompany individual articles.

Ferrites (Cont.)   SOV/4893

Mikhaylovskiy, L. K.   Cross Modulation in a Ferrite   587

Dubossarskaya, V. Yu., A. A. Manuylova, and S. P. Stanishev-
skaya. Investigation of Magnesium-Chromium Ferrites in the
Decimetric Wave Range   591

Fabrikov, V. A.   The Theory of Ferrite Dielectric Delay
Lines With Distributed Constants   596

Shvarts, A. A. Magnetostrictive Cures From Ferric Oxides   607

Shneyev, ... V. . Calculation of Transient Processes in
Pulse Circuits Containing Inductors and Transformers With
Ferrite Cores Which Have Rectangular Hysteresis Loops   617

Delyavskiy, V. P., and ... V. Calculation of Con-
stant Conditions in Pulse Circuits Containing Ferrites With
Rectangular Hysteresis Loops   623

Card 17/18

Card 4/18

30653
S/105/61/000/011/001/002
E140/E563

9.3230 (1013, 1147, 1121)

AUTHORS: Bogolyubov, A. Ye.   Doctor of Technical Sciences,
           Shamayev, Yu. M., Candidate of Technical Sciences and
           Loginov, M. N., Engineer

TITLE: Transient processes in reactive networks containing
           transformers with square-loop ferrites

PERIODICAL: Elektrichestvo no 11, 1961, 60-64

TEXT: The transient processes in reactive networks containing
transformers with square-loop ferrites are solved taking into
account the change of the dynamic hysteresis curve as a function of
the rate of change of magnetization. The problem is solved by
introducing the surface defined by

$$(H - H_o) \quad g(B) \frac{dB}{dt} \tag{1}$$

where H is the external field intensity, $2H_o$ is the width of the
idealized rectangular static hysteresis loop, $g(B)$ is the experi-
mentally determined specific dynamic conductance and dB/dt   is
the rate of variation of magnetic induction in the core. On the
basis of known approximations to the experimental curves, an

Card 1/2

9. 7/50

32027
S/105/62/000/007/001/004
E200/E135

AUTHORS: Bogolyubov, V.E., Doctor of Technical Sciences;
               Shamayev, Yu.M., Candidate of Technical Sciences;   and
               Frolov, L.B., Engineer

TITLE: Analysis of the operation of a single-pulse shift-
               register taking into account the nonlinearity of the
               ferromagnetic material

PERIODICAL: Elektrichestvo, no.7, 1962, 1-5

TEXT: Guidelines are given on the selection of component
parameters for a single-pulse magnetic-core shift-register with a
capacitive delay in the loop; the nonlinear behaviour of the
ferrite is taken into account. Starting from the empirical
equation for the magnetization impulse

$$Q(B) \; = \; \int_{o}^{t} (H - H_{o}) \; dt$$

expressed by Yu.M. Shamayev et al (Izv.AN SSSR, seriya fizich.,
v.23, no.3, 1959) as:
Card 1/5

37027

S/105/62/000/007/001/004

Analysis of the operation of a E200/E135

where: S is the cross-sectional area of the core; ℓ is the
length of the core; u_C is the voltage across the capacitor;
w_1 and w_2 are the number of turns in the input and output
windings respectively; B_r is the residual induction.
Calculations show that the resistance R has a great effect both
upon the process of charging the capacitor and the remagnetization.
At large values of R remagnetization does not occur at all.
Consequently R should not exceed the upper limit found from
inequality (11). It should not be very small, since then the
voltage $u_{C_{max}}$ decreases sharply and, at very low values of R
and small capacitances, remagnetization again fails to occur. In
the illustrative case considered the size of the resistance R
does not affect greatly the mode of operation while it remains
between the limits of 100 – 300 ohms. Within these limits it is
possible to select the actual value of R from other considerations
(minimal power loss, noise stability, etc). The size of the
capacitor has the greatest effect upon the speed of operation of
the register and from this viewpoint the capacitance should be

Card 3/5

Analysis of the operation of a S/105/62/000/007/001/004
                                        E200/E135

chosen as small as possible. However, a reduction of . C will
lead to a lowering of the stability of the remagnetization, as can
be seen from inequalities (24) and (25). To obtain the maximum
stability one should select the value of the capacitance by taking
these conditions into consideration, yet without exceeding the
bounds of inequality (11). Relation (12) shows that . w_2 should
exceed w_1. As w_1 increases, at first the stability of operation
of the register is improved, and then the effect of w_1 upon the
stability is reduced. The influence of the number of turns w_2 is
indirect; expressing itself through the voltage uc_m. To obtain

the highest possible value of uc_m one should take neither very

low nor very high values of w_2. Optimal w_2 lies close to the
value determined by Eq.(12). As H_m increases the maximal
voltage on the capacitor increases and, consequently, the
reliability of operation of the register is improved. At the same
time the operating speed of the. shift-register is increased but the
power requirements are raised. There are 4 figures and 2 tables.

Card 4/5

PIROGOV, Arkadiy Ivanovich; SHAMAYEV, Yuriy Matveyevich;
PASHUKANIS, F.Ye., kand. tekhn.nauk, dots.

[Magnetic cores with rectangular hysteresis loops; static
and dynamic characteristics, methods for measurement and
control, and principles of designing networks with cores
having rectangular hysteresis loops] Magnitrye serdechniki
s priamougol'noi petlei gisterezisa; staticheskie i dina-
micheskie kharakteristiki, metodika izmerenii i kontrolia,
osnovy rascheta tsepei, soderzhashchikh serdechniki s PPG.
Moskva, Izd-vo "Energiia," 1964. 175 p.   (MIRA 17:9)

KOPORSKIY, A.S. (Moskva); PIROGOV, A.I. (Moskva); SHAMAYEV, Yu.M. (Moskva)

Dynamic characteristics of magnetic cores with rectangular
hysteresis loop and their analytical description. Avtom. i telem.
25 no.10:1502-1510 O '64.   (MIRA 17:12)

L 45780-66   EWT(d)/EWP(l)   IJP(c)   GW/BE

ACC NR: AR6016023   SOURCE CODE: UR/0271/66/000/001/B027/B028

AUTHOR: Brin, I. A.; Shamayev, Yu. M.

TITLE: Transmission of binary information over a shift register

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1B193

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. I, 1965, 31-47

TOPIC TAGS: binary information, shift register

ABSTRACT: The concept of an element characteristic which fully determines all the characteristics of the circuit, i. e. module characteristics resulting from an analysis of the transmission characteristics of individual elements, is introduced. These characteristics make it possible to determine all the characteristics of the shift register which use these modules. The characteristic of an element determines the probability of converting an input signal value to an output signal observing the spread of transmission characteristics of individual elements. Differential equations are derived for determining the probability of converting the arbitrary value of an input signal into a zero or unit signal, or the effective length of the circuit. A method of solving the equations and numerical examples is given. Orig. art. has: 1 illustration and 5 tables. [Translation of abstract]   [DW]

SUB CODE: 09/

Card 1/1   UDC: 681. 142. 642. 7

L 47284-5
ACC NR: AR6016013   SOURCE CODE: UR/0271/66/000/001/A009/A009

AUTHOR: Kuznetsov, A. I. ; Shamayev, Yu. M.

TITLE: Analysis and synthesis of circuits containing magnetic cores with a rectangular hysteresis loop and reactive elements

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. , tekhn. , Abs. 1A54

REF SOURCE: Tr. Mosk. energ. in-ta. vyp. 60, ch. I 1965, 63-82

TOPIC TAGS: magnetic core. hysteresis loop, capacitor

ABSTRACT: Rectangular hysteresis loop cores are generally used for storage of information while reactive elements (capacitors. inductors) are connected to the loop couplers between the cores and used for the delay of signals. Processes occurring in the circuit during charge of capacitance through the resistor and core winding and during core magnetic reversal from the capacitance discharged through the resistor are studied. It is demonstrated that in this circuit processes are characterized by nonlinear differential equations which can be quite accurately

Card 1/2   UDC: 62-523:681. 142. 672

L 47126-66   EWT(d)/EWP(l)   IJP(c)   BB/GG

ACC NR: AR6016011   SOURCE CODE: UR/0271/66/000/001/A009/A009

AUTHOR: Zakhodyaychenko, V. I.; Shamayev, Yu. M.

33

B

TITLE: Two trends in designing diodeless magnetic elements using ring cores

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1A52

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. I, 1965, 83-96

TOPIC TAGS: magnetic element, magnetic core, logic circuit, diodeless magnetic element

ABSTRACT: The implementation of a new trend in the development of magnetic logic, i.e., the designing of logical circuits which utilize only a core and connecting wires, is noted. To this end, use is made of complex-shaped cores providing the decoupling of the input and output circuits of magnetic cells. More widely used are cells with cores and two or three apertures. Design variants of diodeless circuits using conventional ring circuits are reviewed. They are

Card   1/2   UDC: 62-523:681.142.672

L 40129-66   EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AR6016025   SOURCE CODE: UR/0271/66/000/001/B031/B031'

AUTHOR: Pirogov, A. I. ; Shamayev, Yu. M.

33

B

TITLE: Magnetic cores with a rectangular static characteristic for storage and
logic circuits

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn. , Abs. 1B222

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. 2, 1965, 13-50

TOPIC TAGS: logic circuit, magnetic core, storage circuit

ABSTRACT: The requirements are given for magnetic cores with a rectangular
hysteresis loop for use in storage and logic circuits. Static characteristics and
parameters of magnetic cores are determined, which, it is pointed out, represent
all magnetic-core properties. The general nonlinear differential equation for the
dynamic state of a magnetic material with a rectangular hysteresis loop in the
process of switching is analyzed. Conclusions are made on the basis of an

Card 1/2   UDC: 681. 142. 67. 621. 385

ACC NR: AR6016025

analysis of static and dynamic characteristics of Soviet magnetic cores, making it possible to determine the value of various characteristics both under normal conditions and with temperature variations. Methods of production control for magnetic cores based on voltage pulses under specific switching conditions, are described. A block diagram of a system for magnetic-core control by a standard and a differential method is given. Static and dynamic parameters of magnetic cores with a rectangular hysteresis loop are presented. Orig. art. has: 14 illustrations and a bibliography of 27 titles. [Translation of abstract]   [DW]

SUB CODE: 09/

Card 2/2

L 59563-65   EWT(d)/EED-2/EWP(1)   Pq-4/Pg-4/Pk-4   IJP(c)   BB/GG

AUTHOR: Brin, I. A. (Moscow); Shamayev, Yu. M. (Moscow)

TITLE: Transmission of binary information through a shift register

SOURCE: Avtomatika i telemekhanika, v. 26, no. 5, 1965, 866-875

TOPIC TAGS: shift register, binary information

ABSTRACT: The shift register is regarded as a chain of series-connected structural
components, or "links". A concept of "link characteristic" is introduced, which
determines the probability of conversion of input signal into output signal, with
an allowance for random spread of characteristics of individual links. The transfer
characteristics of the shift register are found on the basis of link characteris-
tics. Integral equations are set up for determining the probability of conversion
of an arbitraty input into 0 or 1 signal, determining the effective chain
length, etc. The shift register usually contains 10 or more links. To ensure the
conversion of input into 0 or 1, only two absorbing zones are necessary and
sufficient. The characteristics of the chain can be obtained by solving linear
algebraic equations 18-22, whose coefficients are determined by the link-

Card 1/2

L 59563-65

ACCESSION NR: AP5013842   D

characteristic matrix. Shifting the link characteristic to the right or to the
left enhances the probability of signal restoration or noise immunity,
respectively. The "wider" is the link characteristic ($\beta - \alpha$), the longer
should be the chain shaping 0 or 1 signal. Orig. art. has: 1 figure, 38 formulas,
and 5 tables.

ASSOCIATION: None

SUBMITTED: 08May64   ENCL: 00   SUB CODE: DP

NO REF SOV: 000   OTHER: 000

Card 2/2

L 61630-65   EWT(d)/EED-2/EWP(1)   Pq-4/Pg-4/Pk-4   LJP(c)   BB/GG/GS
ACCESSION NR: AT5014708   UR/0000/65/000/000/0028/0037   *25*
                                                                   B+1

AUTHOR: Shamayev, Yu. M.

TITLE: Core characteristics during partial cycling in hyperoperative memories

SOURCE: Operativnyye i postoyannyye zapominayushchiye ustroystva (Rapid and
nonvolatile storage); sbornik statey. Leningrad, Izd-vo Energiya, 1965, 28-37

TOPIC TAGS: partial switching core operation, ultrafast magnetic memory, com-
puter speed improvement, auxiliary memory   *16C*

ABSTRACT: An increase in speed in digital computers may be achieved by perfec-
ting the logical structure and the engineering solution of the various computer
elements. One approach to the simultaneous solution of both problems lies in
the development of an auxiliary, ultrafast, low-capacity magnetic memory of
cores with rectangular hysteresis loop working with partial cycles (partial
switching). The optimum solution of the engineering part of the problem re-
quires a careful theoretical and experimental analysis of core operation during
partial switching. Consequently, the author presents a detailed theoretical
analysis of the problem and supplies the equations needed for engineering de-

Card   1/2

L 61630-65
ACCESSION NR: AT5014708

sign. Orig. art. has: 33 formulas and 3 figures.

ASSOCIATION: None

SUBMITTED: 20Jan65   ENCL: 00   SUB CODE: DP

NO REF SOV: 004   OTHER: 000

Card 2/2

CHIKOVNI, V.M.

Magnetic storage and logical elements of digital devices.
Trudy MEI no.60 pt.1:15-30 '65.

Design and analysis of magnetic-semiconductor switching
circuits. Ibid.:49-62   (MIRA 19:1)

MIL., I.A.; GL MAEV, Yu.N.

Transmission of binary data through a shift registe.
consisting of identical continuous random links. Trudy
MI no.60 pt.1:31-48 '65.   (MIRA 19:1)

KUZNETSOV, A.I.; SHARAYEV, Yu.M.

Analysis and synthesis of networks containing magnetic cores
with rectangular hysteresis loops and reactive elements.
Trudy MEI no.60 pt.1:63-82 '65.   (MIRA 19:1)

MATROVAYCHENKO, V.I.; SEMAYEV, Yu.M.

Two trends in the construction of diodeless magnetic elements using ring cores. Trudy ISI no.60 pt.1:73-96 '65.
(MIRA 19:1)

L 47125-66   EWT(d)/EWP(1)   IJP(c)   BB/GG

ACC NR: AR6016012   SOURCE CODE: UR/0271/66/000/001/A009/A009

INVENTOR: Nemtsov, M. V. ; Shamayev, Yu. M.

60
B

TITLE: Investigation of the switching processes of rectangular hysteresis loop ring cores in weak magnetic fields

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1A53

REF SOURCE: Tr. Mosk. energ. in-ta, vyp. 60, ch. 2, 1965, 87-99

TOPIC TAGS: magnetic core, hysteresis loop, magnetic permeability, magnetic viscosity, ring core, miniature core

ABSTRACT: A description is given of methods developed for investigating pulse magnetic reversal of miniature cores with a rectangular hysteresis loop in magnetic fields corresponding to the ascending sector of the full hysteresis loop. A pulse program providing for magnetic reversal along the limit cycle acts upon the core. In weak fields the viscosity processes in magnesium-manganese ferrites strongly depend on temperature. Maximum viscosity coincides with maximum permeability and is attained in the intensity region corresponding to the initiation of magnetization. The design of the measuring system is described and schematic diagrams of some of its individual units (key using type-P407 transistor, phantastron delay line) are presented. Orig. art. has: 10 illustrations and a bibliography of 4 titles. N. P. /Translation of abstract/   [DW]
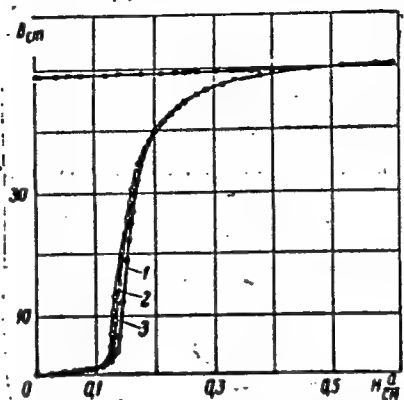
SUB CODE: 09/

Card 1/1   UDC: 62-523:681.142.672+621.318:565

ACC NR: AT6028989

f = 50, 100, and 500 cycles. The "statio" characteristic of a K-222 core is shown on
Fig. 1.

Fig. 1. Dynamic characteristic of
ferrite (3 x 2 x 1.5 mm), obtained
by the pulse method at various
frequencies: 1 - 500 cycles, 2 -
100 cycles, 3 - 50 cycles (T = 290K)

Maximum errors in the induction measurement do not exceed ± 10%. Orig. art. has: 4
figures and 2 formulas.

SUB CODE: 09, 20/ SUBM DATE: 22Dec65/ ORIG REF: 001

Card 2/2

ALKSEYENKO, P.A.; SHAMAYEVA, A.M., agronom-entomolog

In the Tatar A.S.S.R. Zashch. rast. ot vred. i bol. 5 no.1:33-34
Ja '60.   (MIRA 14:6)
          (Tatar A.S.S.R.—Field crops—Diseases and pests)

SHUL'YAT'YEV, I.I.; SHAMAYEVA, A.M., inzh.

New method of covering the taker-in with Garnett wire. Tekst.
prom. 21 no.6:36-37 Je '61.   (MIRA 15:2)

1. Nachal'nik tsentral'noy laboratorii ramenskogo kombinata
"Krasnoye znamya" (for Shul'yat'yev). 2. TSentral'naya laboratoriya
ramenskogo kombinata "Krasnoye znamya" (for Shamayeva)
                        (Carding machines)

MULLIN, S. V.; SHAMAYEVA, A. M., agronom

In Tatarstan. Zashch. rast. ot vred. i bol. 6 no.6:58 Je '61.
(MIRA 16:4)

(Tatar A.S.S.R.—Plants, Protection of)

SHAMAYEVA, A.M., agronom sluzhby ucheta i prognozov

Advantages of plant protection in Tatarstan. Zashch. rast. ot
vred. i bol. 6 no.9:11-12 S '61.   (MIRA 16:5)
        (Tatar A.S.S.R.--Plants, Protection of)

SOV/135-59-8-11/24

18(5,7)
AUTHORS: Tokmakov, V.S., Engineer and Shamayeva, G.G., Candi-
              date of Technical Sciences

TITLE: The Use of Visual X-Ray Control in Welding Joints

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 8, pp 35-36 (USSR)

ABSTRACT: The quality of welded joints is at the present time
              generally controlled with the photographic methods of
              X-ray and gamma-ray control by watching the photo of
              the welded seam in the X-ray film. Since this method
              is using up a lot of photographic materials, and since
              a long time is necessary to develop the film, the me-
              thod can be applied only in spot checks. For a mass
              control of welded joints it would be desirable to re-
              place the photographic method by a visual one in which
              the picture of the work piece appears on a fluorescent
              screen. The use of such screens in X-raying steel of
              a thickness up to 10 mm only permitted to detect flaws
              whose depth is larger than 8% of the total strength
              of the steel. The low sensibility of the visual method
              using X-ray screens finds its explanation in the fact

Card 1/3

SOV/135-59-8-11/24

The Use of Visual X-Ray Control in Welding Joints

that they have a low illumination power. An increase
in the luminosity of the screens may be achieved by
considerably enlarging the capacity of the radiation,
but this would complicate the Roentgen apparatus and
increase the dangerousness of the work. The use of
a television set in the X-raying process made the vi-
sual method completely undangerous, but the sensibili-
ty and depth of transillumination remained the same.
The clearness of the picture can be improved consider-
ably by using an electronic-optical transformer, which
transforms the X-ray picture first into a light-opti-
cal one, then into an electronical one, and then back
into a light-optical picture. The principle of the
X-ray method with an electronic-optical transformer
is shown in figure 1. The improvement in the clear-
ness of the picture in the electronic-optical trans-
former in comparison to the clearness of the X-ray
screen is achieved by enlarging the luminous flux from
the initial screen and by the electronic-optical scal-
Card 2/3   ing down of the picture. The great improvement of

The Use of Visual X-Ray Control in Welding Joints

SOV/135-59-8-11/24

the picture caused by the transformer makes it possible
to control the metal with X-ray installations of low
capacity. Welding-seams of a thickness up to 10 mm
were tested with a Roentgen set of type RUM-4 and a
X-ray tube of type ZBDM-100 which is installed 800
mm from the welding seam. The electronic-optical
transformer which was used was a product of the Philips
company. In conclusion the author compares the sensibili-
ty of the visual and photographic methods. There are
3 graphs and 1 diagram.

ASSOCIATION: TsNIIChM (Tokmakov);   GNIRRI (Shamayeva)

Card 3/3

S/070/62/007/003/018/026
E132/E460

AUTHORS: Shamayeva, G.G., Artamonova, A.P.

TITLE: A visual X-ray method for orienting crystals of
             diamond

PERIODICAL: Kristallografiya, v.7, no.3, 1962, 454-456

TEXT: An electron-optical image converter, giving a brightness
increase of about 1000 over a fluorescent screen, was used for
orientating single crystals of diamond.   An ordinary sealed-off
X-ray tube was used and the goniometer head was adjusted by a
mechanical remote-control cable.   A screen to crystal distance of
116 mm was used.   The peripheral X-ray spots on the screen are
slightly distorted with respect to a photographic record.
Crystals can be set in 2 to 3 minutes.   There are 2 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy
             rentgeno-radiologicheskiy institut (State Scientific
             Research X-ray-Radiological Institute)

SUBMITTED: September 19, 1961

Card 1/1

TYURYUKANOV, A.N.; SHAMAYEVA, G.M.

Iodine distribution in soils as related to their type and microrelief. Nauch.dokl.vys.shkoly; biol.nauki no.2:171-174
'63.
(MIRA 16:4)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(SMOLENSK PROVINCE—SOILS—IODINE CONTENT)

TYURYUKANOV, A.N.; SHAMAYEVA, G.M.

Cartogram of the iodine content of soils in Kaluga Province and methods of its drawing. Nauch. dokl. vys. shkoly; biol. nauki no. 2:196-198 '64.
(MIRA 17:5)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.

METEL'SKIY, V.; SHAMAYEVA, L.; SVIRIDOVICH, V.

Effectiveness of green fallows in Kemerovo Province. Zemledelie
24 no.1:22-27 Ja '62.   (MIRA 15:2)

1. Kemerovskaya oblastnaya gosudarstvennaya sel'skokhozyaystvennaya
opytnaya stantsiya.
                        (Kemerovo Province--Fallowing)

SHAMINA, O.G., seysmolog; VINOGRADOV, S.D., seysmolog; SILAYEVA, O.I.,
    seysmolog; BARLAS, V.Ya., seysmolog; SHAMAYEVA, L.A., seysmo-
    log; RIZNICHENKO, Yu.V., red.; PANTAYEVA, V.A., red.; RYBKINA,
    V.P., tekhn. red.

[Weak earthquakes] Slabye zemletriaseniia. Moskva, Izd-vo ino-
str. lit-ry, 1961. 533 p.   (MIRA 15:1)

1. Institut fiziki Zemli AN SSSR (for Shamina, Vinogradov,
Silayeva, Barlas, Shamayeva).
                    (Earthquakes)

SHAMAYEVA, Ye. M.

SHAMAYEVA, Ye. M. - "Histophysiological Features of the Serous Membrane of the Stomach in Connection With the Processes of Circulation of Fluid in the Abdominal Cavity." Sub 26 Feb 52, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

SHAMAYEVA, Ye.M.; PANKOVA, S.S.

Effect of novoembichine on antibody production (hemolysins and hemagglutinins). Zhur.mikrobiol.epid. i immun. 28 no.4:25-??
Ap '57.
(MIRA 10:10)

1. Iz Instituta eksperimental'noy patologii i terapii raka AMN SSSR.
        (NITROGEN MUSTARDS, eff.
            N-bis(2-chlorethyl)-2-chloropropylamine on prod. of
            hemolysins & hemagglutinins)
        (ANTIBODIES, eff. of drugs on
            same)

SHAMAYEVA, Ye.M., MAYOROVA, N.A., KHALEYEVA, T.G. (Moskva)

Effect of novoembichine on the course of the Arthus-Zakharov
phenomenon and on anaphylactic shock [with summary in English].
Pat.fiziol. i eksp.terap. 2 no.5:29-34 S-O '58   (MIRA 11:12)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-
korrespondent AMN SSSR prof. L.F. Larionov) Instituta eksperimental'noy
patologii i terapii raka AMN SSSR.
           (ALLERGY, exper.
               anaphylactic shock & Arthus phenonmenon, eff. of
               N-Bis (2-chloroethyl-2-propylamine hydrochloride (Rus))
           (NITROGEN MUSTANDARDS, eff.
               N-bis (2-chloroethyl-2-propylamine hydrochloride,
               on exper. anaphylactic shock & Arthus pehnomenon (Rus))

LARIONOV, L.F.; BUKHAROVA, I.K.; SHAMAYEVA, Ye.M.

Experimental study of the toxicity and the antineoplastic activity
of the ethyl ester of acetylsarcolysine-L-leucine. Vop. onk. 11
no.4:78-80 '65.   (MIRA 18:8)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-
korrespondent AMN SSSR prof. L.F.Larionov) Instituta eksperimental'-
noy i klinicheskoy onkologii AMN SSSR (direktor - deystvitel'nyy
chlen AMN SSSR prof. N.N.Blokhin).

SHAMBO, N. A., SHEFTAL, N. N, and KOKORISH, N. P.,

Institute of Crystallography, Acad. Sc., Moscow,-"Some Peculiarities in Crystallization of Silicium and Germanium Films and Silicium SingleCrystals" (Section 14-5) a paper submitted at the General Assembly and International Congress of Crystallography, 10-19 Jul 57, Montreal, Canada.

C-3,800,189

137-58-4-6980

SHAMBA, N A

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 95 (USSR)

AUTHORS: Mitrenin, B. P. , Burdiashvili, Sh. S. , Shamba, N. A. , Volkov,
V. P. , Kovyrzin, V. K. , Solov'yev, L. K.

TITLE: Obtaining Single Crystals of Silicon by Extraction From a Melt
(Polucheniye monokristallov kremniya metodom vytyagivaniya iz
rasplava)

PERIODICAL: V sb.: Vopr. metallurgii i fiz. poluprovodnikov, AN SSSR
1957, pp 24-34

ABSTRACT: The possibility of obtaining large single crystals with a speci-
fied orientation from material purified by acid washing or ob-
tained by reduction of $SiCl_4$ by zinc, and the distribution of cer-
tain impurities in the extracted bar was investigated by the use
of tagged atoms. The apparatus built employed high frequency
heating of a base in which there was emplaced a quartz crucible
containing the Si, or by means of a graphite resistance heater in
the center of which, and on a quartz base, there was placed a
graphite holder with the quartz crucible having the Si. A vacuum
of 10^{-4} mm Hg was maintained in the apparatus. The crucible
was free to rotate at a speed of 1 rpm. and the seed in a direc-

Card 1/3

137-58-4-6980

Obtaining Single Crystals of Silicon by Extraction From a Melt

tion opposite to that of the rotation of the crucible at a rate of 2 rpm. The rate of extraction was 0.5-1 mm/min. It was established that when a slag film existed at the surface of the melt it was not possible to obtain any single crystals, as a number of small crystals appeared at points of accumulation of slag and at the point of inoculation. Repeated extractions after careful etching. and upon removal of visible slag inclusions on the surface of the bar by emery and cutting away of its ends made it possible to obtain single crystals of 15-20 mm diameter and lengths up to 240 mm. Before pulling the crystal. the melt was held for 15-20 min at the pulling temperature in order for equilibrium to be established. The opinion is offered that the polycrystallinity of a drawn bar is also due to the formation of a film of SiO_2 when the vacuum is reduced below 10^{-4} mm Hg, additional centers of crystallization being set up thereby. One of the possible causes of further increase in vacuum is the reaction of quartz and graphite, and therefore the crucibles in the apparatus employed were placed so that they would touch the bases only at three points. It was observed that vibration of the apparatus facilitated twinning in the single crystal being grown. Radioactive isotopes made it possible to determine that Sb and Ag (respectively 1.5 and 6.1 mg per 40 g Si) were completely distilled from the melt and were not to be found in the crystal Ta (12.5 mg per 40 g Si) remained in its entirety in the zone, and was the last to solidify. while Fe
Card 2/3

137-58-4-6980

Obtaining Single Crystals of Silicon by Extraction From a Melt

(46.6 mg per 40 g Si) undergoes virtually uniform distribution through the bar in the process of extraction, the bulk of it remaining in the melt.

1 Single crystals--Production   2 Silicon tetrachloride--Reduction   I S.
3. Zinc--Applications

Card 3/3

AUTHOR: Shamba, N.A. and Sheftal, N.N.   70-3-20/20

TITLE: Spiral growth of silicon crystals (Spiral'nyy rost kristallov kremniya)

PERIODICAL: "Kristallografiya" (Crystallography), 1957, Vol.2, No.3, pp. 441 - 444 (U.S.S.R.)

ABSTRACT: This is a preliminary communication and the results are given relating to certain morphological features of the growth of silicon crystals. The authors established that in the growth of these crystals, the macro-size spiral formations play an important rôle. They found that large silicon acicules of 6 to 7 cm length represent a strongly-stretched spiral of pyramid cross-section. The experiments covered growth of crystals, growth of silicon crystals from the melt in a crucible, spiral growth of mono-crystals of silicon drawn out from a melt at a speed of 1 mm/min and spiral growth in the case of crystallisation from the gaseous phase. They found that even in the case of crystallisation from the gaseous phase, a macro-spiral form of growth of the crystals occurred.
    Acknowledgments are made to B.P. Mitrenin , V.I. Khachish-vili and Dr.Ye.Ye. Rekser . There are 11 figures and photo-graphs and 1 German references.

Card 1/1

SUBMITTED: October 23, 1956.
AVAILABLE: Library of Congress

Negative Silicon Crystals

76008
SOV/70-4-5-30/36

a hexagon with an inscribed equilateral triangle, and
all the faces became exposed. Still further etching
expanded and moved the crystal faces deeper into the
host crystal, but did not alter their forms. Among
the faces, four (111) and three (100) were determined
by X-ray methods. The (111) faces showed numerous
steps separating incomplete atomic layers of roughly
triangular outlines. The negative prisms were turned
under 30° relative to the silicon prisms in which they
grew. The vertices of the inscribed triangle at the
bottom were in the middle of hexagon edges. As a whole,
the negative crystals were similar to the host crystals.
There are 4 figures; and 4 references, 2 Soviet, 1
German, 1 French.

SUBMITTED: January 4, 1959

Card 2/2

SHAMBA, N.A.

Some data on the forms of dissolution of silicon crystals. Kris-
tallografiia 6 no.2:283 Mr-Ap '61.   (MIRA 14:9)
                    (Silicon crystals) (Solution (Chemistry))

S/081/62/000/010/050/085
B168/B180

//.7000

AUTHOR: Shamban, N. P.

TITLE: Anticorrosion coatings on the basis of a chlorin skin

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 365, abstract
                10I261 (Vestn. tekhn. i ekon. inform. N.-i. in-t
                tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii,
                no. 8, 1961, 50)

TEXT: A new method of protecting equipment against corrosion has been
devised, i. e. by sticking a chlorin skin onto a metal surface and then
impregnating with pervinyl chloride varnish. The skin is applied to a
fresh layer of primer, enamel, pervinyl chloride lacquer or copolymers
of polyvinyl chloride. It is resistant to dilute or concentrated acids
HCl, H_2SO_4, HNO_3, H_2CrO_4, H_3PO_4, $HCOOH$, alkalis, seawater and
microorganisms. It is noted that the chlorin skin can be used as a
protective intermediate layer between metal and lining of acidproof
bricks or diabase tiles. The sequence in which the coatings are applied
Card 1/2

Anticorrosion coatings on....   S/081/62/000/010/050/085
                                             B168/B180

is described. [Abstracter's note: Complete translation.]

Card 2/2

ANTSUTA, Ye.B., arkhit.; KIRILLOV, N.P., arkhit.; KUZNETSOV, V.V., arkhit.;
SLOTINTSEVA, M.N., arkhit.; PYATIN, S.G., inzh. Prinimali uchastiye:
CHUYENKO , R.G., arkhit.; MOSEVICH, Ya.Ya., arkhit.; GLAZKOV, F.I.,
st. tekhnik; GOLUKHOV, G.I., inzh.; SAMSONOVA, T.T., inzh.; KOLESOVA,
Ye.Ye., st. tekhnik; MAKAROVA, T.N., tekhnik; SHAMBAT, M.S., inzh.;
SEMENOVA, G.V., inzh.; PLATUNIN, Yu.S., gr. inzh. ; VOL'NOVA, T.F.,
tekhnik; SOLOV'YEV, M.I., inzh.; MOREV, I.A., tekhnik.

[Two-apartment house with two-room apartments; standard plan 1-102-5]
Dvukhkvartirnyi zhiloi dom, kvartiry v dve komnaty; tipovoi proekt
1-102-5. Moskva, Al'bom 1. 1960. 27 p.   (MIRA 14:10)

1. Moscow. TSentral'nyy institut tipovykh proyektov.
        (Apartment houses—Designs and plans)

SHAMBERG, V.M

ABRAMOV, V.A.; ALEKSEYEV, A.M.; AL'TER, L.B.; ARAKELYAN, A.A.; BAKLANOV, G.I.;
BASOVA, I.A.; BLYUMIN, I.G.; BOGOMOLOV, O.T.; BOR, M.Z.; BREGEL',
E.Ya.; VEYTSMAN, N.R.; VIKENT'YEV, A.I.; GAL'TSOV, A.D.; GERTSOVSKAYA,
B.R.; GLADKOV, I.A.; DVORKIN, I.N.; DRAGILEV, M.S.; YEFIMOV, A.N.;
ZHAMIN, V.A.; ZHUK, I.N.; ZAMYATNIN, V.N.; IGNAT'YEV, D.I.; IL'IN,
M.A.; IL'IN, S.S.; IOFFE, Ya.A.; KAYE, V.A.; KAMENITSER, S.Ye.;
KATS, A.I.; KLIMOV, A.G.; KOZLOV, G.A.; KOLGANOV, M.V.; KONTOROVICH,
V.G.; KRAYEV, M.A.; KRONROD, Ya.A.; LAKHMAN, I.L.; LIVANSKAYA, F.V.;
LOGOVINSKAYA, R.L.; LYUBOSHITS, L.I.; MALYSH, A.I.; MENZHINSKIY,
Ye.A.; MIKHAYLOVA, P.Ya.; MOISEYEV, M.I.; MOSKVIN, P.M.; NOTKIN,
A.I.; PARTIGUL, S.P.; PERVUSHIN, S.P.; PETROV, A.I.; PETRUSHOV, A.M.;
PODGORNOVA, V.M.; RABINOVICH, M.A.; RYVKIN, S.S.; RYNDINA, M.N.;
SAKSAGANSKIY, T.D.; SAMSONOV, L.N.; SMEKHOV, B.M.; SOKOLIKHIN, S.I.;
SOLLERTINSKAYA, Ye.I.; SUDARIKOV, A.A.; TATAR, S.K.; TERENT'YEV,
P.V.; TYAGAY, Ye.Ya.; FEYGIN, Ya.G.; FIGURNOV, P.K.; FRUMKIN, A.B.;
TSYRLIN, L.M.; SHAMBERG, V.M.; SHAPIRO, A.I.; SHCHENKOV, S.A.;
EYDEL'MAN, B.I.; EKHIN, P.E.; MITROFANOVA, S., red.; TROYANOVSKAYA, N.,
tekhn.red.

[Concise dictionary of economics] Kratkii ekonomicheskii slovar'.
Moskva, Gos.izd-vo polit.lit-ry, 1958. 391 p.   (MIRA 11:7)
          (Economics--Dictionaries)

SHAMBERG, Vladimir Mikhaylovich; PODGORNOVA, V., red.; MUKHIN, Yu.,
tekhn.red.

[For whom does time work; ten questions and answers about the
seven-year plan and the economic competition between the U.S.S.R.
and the United States] Na kogo rabotaet vremia; 10 voprosov i
otvetov o semiletke i ekonomicheskom sorevnovanii mezhdu SSSR i
SShA. Moskva, Gos.izd-vo polit.lit-ry, 1959. 63 p. (MIRA 12:11)
            (Russia--Foreign relations--United States)
                (Russia--Economic policy)

ARZUMANYAN, A.A., akademik, red.; RUMYANTSEV, A.M., red.; SHAMBERG, V.M., red.; ZHILIN, Yu.A., red.; ARDAYEV, G.B., red.; KUCHINSKIY. N.N., red.; KATSMAN, G.V., red.

[Problems of modern capitalism and the working class] Problemy sovremennogo kapitalizma i rabochii klass; materialy obmena mne-niiami, provedennogo teoreticheskim i informatsionnym zhurnalom kommunisticheskikh i rabochikh partii "Problemy mira i sotsia-lizma" i Institutom mirovoi ekonomiki i mezhdunarodnykh otno-shenii Akademii nauk SSSR. Prague, Izd-vo "Mir i sotsializm," 1963.   610 p.   (MIRA 16:7)

1. Chlen-korrespondent AN SSSR (for Rumyantsev).
       (Capitalism)   (Labor and laboring classes)

[illegible typewritten text], STALINOVAKA, I.I., veterinarnyy vrach
[illegible] (Chuvashskaya ASSR); S.V. ZININ,
[illegible] (Chuvashskaya Sotsialisticheskaya
Respublika); POPOVA, M.A., referent

[illegible] of products [illegible]. Veterinariia 40 no.1
[illegible] Ja '63.   (MIRA 17:9)

SHAMBEREV, Yu.N., starshiy nauchnyy sotrudnik, kand. sel'skokhoz. nauk;
ATRASHKOV, V.A., starshiy nauchnyy sotrudnik, kand. sel'skokhoz.
nauk

Use of anabolic preparations in fattening young cattle and sheep.
Izv. TSKHA no.4:197-204 '65.   (MIRA 18:11)

SHCHERBA, I.G.; Pavlov, SHCHERBAKOVA, V.F., veterinarnyy vrach
(Udmurtskaya Sotsialisticheskaya Respublika); SHLINGER,
Iu., veterinarnyy vrach (Chuvashskaya Sotsialisticheskaya
Respublika); POPOVA, M.I., internat

In the countries of people's democracy. Veterinariia 41 no.1:
89-90 Ja '64.   (MIRA 17:3)

YEVTUSHENKO, Gavriil Alekseyevich, SHAMLETOV, S., otv. red.;
ANOKHINA, M.G., tekhn. red.

[Causes of the decrease of the sugar content of sugar beets
in Kirghizistan]Prichiny snizheniia sakharistosti sakharnoi
svekly v Kirgizii. Frunze, Izd-vo Akad. nauk Kirgizskoi SSR,
1961. 66 p.   (MIRA 15:10)
                     (Kirghizistan--Sugar beets)

SEAMEETOV, S. Sh.: Master Biol Sci (diss) -- "Secondary structural changes in the bark of annual suckers of woody plants". Leningrad, 1958. 20 pp (Acad Sci USSR, Botanical Inst im V. L. Komarov), 175 copies (KL, No 6, 1959, 130)